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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,517	07/22/2004	Petrus Maria De Greef	NL020069	6089

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PHILIPS ELECTRONICS NORTH AMERICA CORPORATION
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EXAMINER

KOVALICK, VINCENT E

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/502,517

Applicant(s)

DE GREEF, PETRUS MARIA

Examiner

Vincent E. Kovalick

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to Applicant's Patent Application, Serial No. 10/502,517, with a File Date of July 22, 2004.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 5 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara (USP 6,268,890 taken with Gordon (USP 4,975,728).

Relative to claims 1, 5 and 16, Kawahara **teaches** a plasma display panel (PDP) apparatus with selected combinations of subfields displayed for a gray level (col. 3, lines 8-67 and col. 4, lines 1-30); Kawahara further **teaches** a method for addressing cells of a display panel, each cell corresponding to a pixel in response to a video signal (col. 7, lines 53-60 and col. 8, lines 1-15). Kawahara **does not teach** the method of addressing cells characterized by the step of skipping (ALS) the addressing of those cells that are identified as being not active.

Gordon **teaches** a digitally-addressable display device such as a x-y matrix-addressed display (col. 1, lines 12-67 and col. 2, lines 1-18); Gordon further **teaches** the method of addressing display cells characterized by the step of skipping (ALS) the addressing of those cells which are identified as being not active (col. 12, lines 25-39 and Abstract).

Art Unit: 2629

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the methodology as taught by Kawahara the feature as taught by Gordon in order to optimize the time for executing the data processing steps by skipping those pixel addresses where no signal change is required.

Regarding claim 15, it would have been obvious to a person of ordinary skill in the art at the time of the invention that the sustaining time could be increased by what ever period of time is gained by skipping the addresses of the cells that are not active.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara taken with Gordon as applied to claim 1 in item 3 herein above, and further in view of Noecker (USP 6,396,508).

Regarding claim 2, Kawahara taken with Gordon **does not teach** the method wherein the video signal includes fields and each field is defined by a plurality of subfields, characterized in that said skipping step is carried out during the addressing of the subfields.

Noecker **teaches** display devices methodology for improving the image quality of a display in which a pixel is illuminated by pulses generated in subfields of an image frame (col. 4, lines 59-67 and col. 5, lines 1-25); Noecker further **teaches** the method wherein the video signal includes fields and each field is defined by a plurality of subfields, characterized in that said skipping step is carried out during the addressing of the subfields (col. 2, lines 17-26). (It being understood that in order to skip those addresses at which cells are identified as being not active, the skipping would have to be done during the subfield addressing period).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the methodology as taught by Kawahara taken with Gordon the feature as taught by

Art Unit: 2629

Noecker in order to generate the subfields corresponding to an image frame and in turn address each of the cells (pixels), skipping those cells that are identified as being not active.

5. Claim 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara taken with Gordon in view of Noecker as applied to claim 2 in item 4 hereinabove, and further in view of Sano (JP407049663A).

Relative to claims 3 and 4, Kawahara taken with Gordon in view of Noecker **does not teach** the method for addressing cells characterized in that all groups with identical subfield-data are grouped and all lines with identical subfield-data are grouped.

Sano **teaches** a method for driving plasma display panel (Abstract); Sano further **teaches** the method for addressing cells characterized in that all groups with identical subfield-data are grouped and all lines with identical subfield-data are grouped (Constitution and Figs. 1 and 2).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the methodology as taught by Kawahara taken with Gordon in view of Noecker the feature as taught by Sano in order to organize groups with like sub-fields into groups and all lines with identical subfield-data into groups in order to address all identical groups during one group address period.

6. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara taken with Gordon as applied to claim 5 in item 3 herein above, and further in view of Hanley (USP 5,235,272).

Relative to claim 6 Kawahara taken with Gordon **does not teach** a device for addressing cells of a display panel characterized by means for identifying those cells which are not active.

Art Unit: 2629

Hanley **teaches** a method and apparatus for automatically inspecting and repairing a display panel (col. 2, lines 14-67 and col. 3, lines 1-50); Hanley further **teaches** a device for addressing cells of a display panel characterized by means for identifying those cells which are not active (col. 2, lines 60-68).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the methodology as taught by Kawahara taken with Gordon the feature as taught by Hanley in order to identify the addresses of those cells that are not active to facilitate skipping said addresses during the data processing steps.

Regarding claim 7, Gordon further **teaches** said device for addressing cells of a display panel characterized by means for checking all the cells as to whether or not they are active (col. 12, lines 24-39).

Relative to claim 8, still further Gordon **teaches** said device for addressing cells of a display panel characterized in that said skipping means is provided for skipping the addressing of a group of those cells that are identified as being not active (col. 12, lines 24-39).

7. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara taken with Gordon as applied to claim 5 in item 3 herein above, and further in view of Sano. Regarding claims 9 and 11, Kawahara taken with Gordon **does not teach** said device for addressing cells of a display panel wherein each group is addressed during a predetermined group addressing period having a constant time interval for all groups, further characterized by means for grouping all groups having identical data and addressing them during one group addressing period; or, characterized by means for grouping all lines with identical data and addressing them during one line addressing period.

Art Unit: 2629

Sano **teaches** wherein each group is addressed during a predetermined group addressing period having a constant time interval for all groups, further characterized by means for grouping all groups having identical data and addressing them during one group addressing period; or, characterized by means for grouping all lines with identical data and addressing them during one line addressing period (Abstract and Constitution).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the methodology as taught by Kawahara taken with Gordon the feature as taught by Sano in order to organize groups with like sub-fields into groups and all lines with identical subfield-data into groups in order to address all identical groups during one group address period.

Relative to claim 10, Gordon further **teaches** said device for addressing cells of a display panel wherein the cells are arranged as a matrix array and each cell is positioned at an intersection of a line and a column, characterized in that said skipping means are provided for skipping the addressing of a line where all cells are not active (col. 12, lines 24-39 and Abstract).

8. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara taken with Gordon as applied to claim 5 in item 3 herein above, and further in view of Hashimoto et al. (USP 6,188,635).

Relative to claim 12, Kawahara taken with Gordon **does not teach** the said device for addressing cells of a display panel characterized by means for setting up a ski-table indicating all the cells that are identified as being not active.

Hashimoto et al. **teaches** a process of synchronously writing data to a dynamic random access memory array (col. 1, lines 62-67 and col. 2, lines 1-21); Hashimoto et al. further **teaches**

Art Unit: 2629

said device for addressing cells of a display panel characterized by means for setting up a skip-table indicating all the cells that are identified as being not active. (It being understood that the memory unit containing the inactive pixel addresses serves as the skip-table).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the methodology as taught by Kawahara taken with Gordon the feature as taught by Hashimoto et al. in order put in place the means to store the addresses or those cells identified as being inactive.

Regarding claims 13 and 14, Gordon further **teaches** said device for addressing cells of a display panel characterized in that said skip-table indicates all the groups or all the lines including those cells only that are identified as being not active (col. 12, lines 24-39).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No. RE37,847 Henley et al.

U. S. Patent No. 6,188,619 Jing

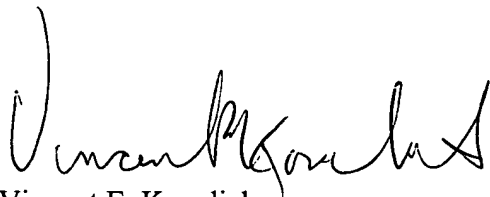
Art Unit: 2629

To Respond

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent E. Kovalick whose telephone number is 571-272-7669. The examiner can normally be reached on Monday-Thursday 7:30- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Vincent E. Kovalick
June 21, 2006



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